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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,528	12/19/2003	Jim Recknagel	27475/05250	1527

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EXAMINER

GALL, LLOYD A

ART UNIT PAPER NUMBER

3676

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	02/02/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/707,528

Applicant(s)

RECKNAGEL ET AL.

Examiner

Lloyd A. Gall

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 20 November 2006.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 13 and 14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 and 15-21 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
- Paper No(s)/Mail Date \_\_\_\_\_.

- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_.

### DETAILED ACTION

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 5-10 are rejected under 35 U.S.C. 102(b) as being anticipated by Setterberg.

Setterberg teaches a coupler lock including a lock body 2, a locking mechanism 16, an adjustable means including a shaft 6 having plural recesses with vertical and tapered edges, a spring-biased 12 locking plate 10 having a notch at 13 engaged by a cam 15, the cam includes an unlabeled groove in figure 3 and a projection 14 for engaging the notch at 13. With respect to claim 5, line 4, it is noted that an object is not being positively claimed. Further, with respect to claim 5, line 5, the lock of Setterberg is capable of being locked to an object, such as having the object provided with an opening to be received between the heads 1 and 2 of Setterberg. Accordingly, the adjustable shaft 6 of Setterberg allows the lock body to move in two directions relative to any object which includes such an opening to receive the shaft, that is, the shaft 6 may be inserted in either direction through such object opening, and the lock body 2 may be moved in either direction to engage the shaft, depending on which direction relative to the object opening the shaft is inserted. The shaft in claims 5-10 is not being claimed as movable in two insertion directions relative to the lock body.

Claims 1, 3-12 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Heyer.

Heyer teaches a lock body 1, an adjustable means including a shaft having a narrow end 13, flange end 12 and plural recesses with vertical 15 and tapered 16 edges, a locking mechanism 10 to receive a key, plural spring-biased 20 locking plates 4 having openings 17 to engage the shaft recesses, wherein the locking plates allow movement of the shaft in only one direction when the plates engage the recesses. With respect to claim 8, the key defines a cam which engages the locking mechanism 10 and the notches 21, 23 of the locking plates, the key as seen in fig. 15 defines a cam having projections and grooves defined by the key ridges (key biting). With respect to claim 1, lines 7-8, the shaft of Heyer is capable of insertion into an opening of an object in both directions of insertion into the object, and then locked by the lock body 1. With respect to independent claims 1, 5 and 17, shaft is not claimed as insertable in both directions relative to the lock body, and the shaft of Heyer is capable of insertion in two directions relative to an object, which object also is not being positively claimed.

Claims 1, 3-9, 18, 20 and 21 are rejected under 35 U.S.C. 102(b) as being anticipated by Casey (227).

It is first noted that an object is not being positively claimed. Casey teaches an adjustable lock including a lock body 27, a locking mechanism 29, two locking plates 37, 38, two shafts 24, 26 having an end which may be regarded as narrow, and a second, flanged end 24', 26', recesses 24", 26" along the shafts, wherein the shafts may be inserted in either direction through the lock body, even if the flanges 24', 26' will extend

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in a different direction relative to the lock body, since they would still be capable of engaging an object. With respect to claims 8 and 9, Casey also teaches a cam 33 in fig. 8 engageable with the locking mechanism 29 by the projection 30 in fig. 8 which engages a groove in the cam, and also engageable with a locking plate 37 in fig. 8 by the cam radial projection 33'. With respect to claim 18, it is also noted that a hitch ball and coupler latch are not being positively claimed.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Setterberg in view of Heyer.

Heyer teaches a locking plate 4 with an opening 17 with a peripheral edge to receive a shaft having recesses 15, 16. It would have been obvious to substitute a locking plate with an opening to receive the shaft for the locking plate 10 of Setterberg, in view of the teaching of Heyer, the motivation being to provide a greater surface area of contact with the shaft recess of Setterberg.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Heyer in view of Freck.

Heyer has been discussed above. Freck teaches lock components of stainless steel in column 3, line 23. It would have been obvious to form components of Heyer of stainless

steel, in view of the teaching of Freck, the motivation being to provide corrosion resistance.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Heyer in view of Winner or Hampton et al.

In fig. 2, Winner teaches an element 51 which may be regarded as a seal around a portion of a lock body 49, or a coating around the shaft 65. Hampton teaches a seal 46 around a lock body, and a coating 34 around a shaft 14. It would have been obvious to provide a seal and coating with the lock body and shaft of Heyer, in view of the teaching of Winner or Hampton et al, the motivation being to provide corrosion resistance to the lock body and shaft of Heyer.

Claims 2 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casey in view of Freck.

Freck teaches lock components of stainless steel in column 3, line 23. It would have been obvious to form components of Casey of stainless steel, in view of the teaching of Freck, the motivation being to provide corrosion resistance.

Claims 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Casey in view of Winner or Hampton et al.

In fig. 2, Winner teaches an element 51 which may be regarded as a seal around a portion of a lock body 49, or a coating around the shaft 65. Hampton teaches a seal 46 around a lock body, and a coating 34 around a shaft 14. It would have been obvious to provide a seal and coating with the lock body and shaft of Casey, in view of the teaching

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of Winner or Hampton et al, the motivation being to provide corrosion resistance to the lock body and shaft of Casey.

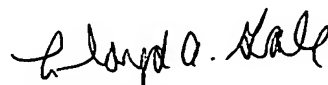
Applicant's arguments with respect to claims 1-21 have been considered but are moot in view of the new ground(s) of rejection.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lloyd A. Gall whose telephone number is 571-272-7056. The examiner can normally be reached on Monday-Friday, 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6843. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LG LG  
January 30, 2007

  
Lloyd A. Gall  
Primary Examiner